

Title (en)  
DNA VACCINATION FOR TREATMENT OF AUTOIMMUNE DISEASE

Title (de)  
DNA-IMPFGUNG ZUR BEHANDLUNG VON AUTOIMMUNERKRANKUNGEN

Title (fr)  
VACCINATION PAR ADN POUR LE TRAITEMENT DE MALADIES AUTO-IMMUNES

Publication  
**EP 1168923 B1 20051102 (EN)**

Application  
**EP 00912207 A 20000310**

Priority

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- US 26759099 A 19990312

Abstract (en)  
[origin: WO0053019A1] A pro-inflammatory T cell response is specifically suppressed by the injection into a recipient of DNA encoding an autoantigen associated with autoimmune disease. The recipient may be further treated by co-vaccination with a DNA encoding a Th2 cytokine, particularly encoding IL4. In response to the vaccination, the proliferation of autoantigen-reactive T cells and the secretion of Th1 cytokines, including IL-2, IFN- gamma and IL-15, are reduced.

IPC 1-7  
**A01N 63/00**; **A01N 65/00**; **A61K 31/70**; **A61K 39/00**; **A61K 39/38**; **C12N 15/00**; **C12N 15/08**; **C12N 15/09**; **C12N 15/63**; **C12N 15/70**; **C07K 14/47**; **A61P 37/06**

IPC 8 full level  
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CPC (source: EP)  
**A61K 38/2026** (2013.01); **A61K 39/0008** (2013.01); **A61P 25/00** (2017.12); **A61P 37/00** (2017.12); **A61P 37/02** (2017.12); **A61P 37/06** (2017.12); **C07K 14/4713** (2013.01); **A61K 2039/53** (2013.01); **A61K 2039/57** (2013.01)

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**WO 0053019 A1 20000914**; AT E308244 T1 20051115; AT E453404 T1 20100115; CA 2363269 A1 20000914; CA 2363269 C 20120612; DE 60023673 D1 20051208; DE 60023673 T2 20060720; DE 60043624 D1 20100211; DK 1168923 T3 20060320; DK 1621208 T3 20100510; EP 1168923 A1 20020109; EP 1168923 A4 20020626; EP 1168923 B1 20051102; EP 1621208 A1 20060201; EP 1621208 B1 20091230; EP 2177228 A1 20100421; ES 2251974 T3 20060516; ES 2338890 T3 20100513; JP 2003508346 A 20030304; PT 1621208 E 20100407

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